ABSTRACT OF THE INVENTION

An alignment structure and an alignment method which generates a plurality of spot images from the same light source and aligns individual spot images between different fields in independently steps without affecting the alignment of other spot images. The camera has a plurality of focusing members referenced to a common focal plane array of a plurality of detectors. The alignment structure has a light source, a collimator and a multiple-beam generator. A light beam generated by the camera is collimated and split into a plurality of components converging on the camera at angles within field of view of the camera. Multiple fields of a plurality of spot images are formed on the focal plane. By translating and rotating the focusing members, distances of the corresponding spot images between different fields are minimized to align the camera.